

STUDY ABROAD AT MONASH UNIVERSITY **ELECTRICAL CONCENTRATION**

- The table below shows the modified curriculum for the junior and senior years. Shaded cells show the changes in the course sequence.
- In this recommended course of study, the study abroad semester is the first semester of the junior year.
- The standard curriculum is used for the freshman and sophomore years and for the second semester of the senior year.
- Equivalents of EEN307, IEN 311, and BME335, and two PS/HA electives, are taken at Monash University. All other courses remain the same, but are taken in a slightly different sequence.

| Junior Year: | | | | | |
|----------------------------|--|-----------|--------------|---------------------------------|-----------|
| ECE2031 | Circuits and control (Equivalent of EEN 307) | 6 | EEN304 | Logic Design | 3 |
| STA1010 | Statistical Methods for Science (Equivalent of IEN 311) | 6 | EEN305 | Electronics 1 | 3 |
| MTE2548 | Biomaterials I (Equivalent of BME335) | 6 | BME311 | Matlab for Biomedical Engineers | 1 |
| | People and Society Elective* | 6 | BME330 | Foundations of Medical Imaging | 3 |
| | Humanities and Arts Elective* | 6 | BME 375 | Biomechanics I | 3 |
| | | | BME401 | Senior Project I | 1 |
| | | | BME440 | Biomedical Measurements | 4 |
| | | | | | |
| | | | | | |
| | | | | | |
| UM Equivalent Total | | 15 | Total | | 18 |

| Senior Year: | | | | | |
|---------------------|---|-----------|--------------|--|-----------|
| BME402 | Senior Project II | 2 | BME403 | Senior Project III | 3 |
| BME 480 | Biomedical Instrumentation | 3 | BME 540 | Computer Based Medical Instrumentation | 3 |
| BME 570 | Introduction to Biosignal Processing | 3 | BME 541 | Medical Electronics Systems Laboratory | 2 |
| BME 507 | LabView Applications for Biomedical Engineering | 1 | BME 560 | Biomedical Transport Phenomena | 3 |
| | Technical Elective | 3 | | Technical Elective | 3 |
| EEN 315 | Digital Design Laboratory | 1 | | Advanced PS/HA Elective | 3 |
| | Advanced PS/HA Elective | 3 | | | |
| Total | | 16 | Total | | 17 |

* To be selected from approved lists.

STUDY ABROAD AT MONASH UNIVERSITY

MECHANICAL CONCENTRATION

- The table below shows the modified curriculum for the junior and senior years. Shaded cells show the changes in the course sequence.
- In this recommended course of study, the study abroad semester is the first semester of the junior year.
- The standard curriculum is used for the freshman and sophomore years and for the second semester of the senior year.
- Equivalents of EEN307, IEN 311 and BME335, and two PS/HA electives, are taken at Monash University. All other courses remain the same, but are taken in a slightly different sequence.

| Junior Year: | | | | | |
|----------------------------|--|---|-----------|---------------------------------|---|
| ECE2031 | Circuits and control (Equivalent of EEN 307) | 6 | MAE 207 | Mechanics of Solids II | 3 |
| STA1010 | Statistical Methods for Science (Equivalent of IEN 311) | 6 | BME 330 | Foundations of Medical Imaging | 3 |
| MTE2548 | Biomaterials I (Equivalent of BME335) | 6 | BME 375 | Biomechanics I | 3 |
| | People and Society Elective* | 6 | BME 440 | Biomedical measurements | 4 |
| | Humanities and Arts Elective* | 6 | BME 460 | Physiologic Fluid Mechanics | 3 |
| | | | BME 311 | Matlab for Biomedical Engineers | 1 |
| | | | BME 401 | Senior Project I | 1 |
| UM Equivalent Total | | | 15 | Total | |
| | | | | 18 | |

| Senior Year: | | | | | |
|---------------------|----------------------------------|---|-----------|---------------------------------------|---|
| BME 402 | Senior Project II | 2 | BME 403 | Senior Project III | 3 |
| BME480 | Biomedical Instrumentation | 3 | BME 560 | Biomedical Transport Phenomena | 3 |
| BME 570 | Intro. to Biosignal Processing | 3 | BME 575 | Biomechanics II | 3 |
| | Technical Elective | 3 | BME 587 | Finite Element Analysis for Engineers | 3 |
| BME 506 | ProEngineer Applications for BME | 1 | | Technical Elective | 3 |
| | Advanced PS/HA Elective | 3 | | Advanced PS/HA Elective | 3 |
| Total | | | 15 | Total | |
| | | | | 18 | |

* To be selected from approved lists.

STUDY ABROAD AT MONASH UNIVERSITY

PREMED CONCENTRATION

- The table below shows the modified curriculum for the sophomore, junior, and senior years. Shaded cells show the changes in the course sequence.
- In this recommended course of study, the study abroad semester is the first semester of the junior year.
- The standard curriculum is used for the freshman year, the first semester of the sophomore year, and the second semester of the senior year.
- Equivalents of EEN307, IEN 311 and BME335, and two PS/HA electives, are taken at Monash University. All other courses remain the same, but are taken in a slightly different sequence.

| Sophomore Year: | | | | | |
|------------------------|---------------------------------|---|--------------|--------------------------------|---|
| MTH 311 | Ordinary Differential Equations | 3 | BIL 215 | Systemic Human Physiology | 3 |
| CHM 112 | Principles of Chemistry II | 3 | BIL 216 | Physiology Lab | 1 |
| CHM 114 | Chemistry Laboratory II | 1 | PHY 209 | University Physics Lab III | 1 |
| PHY 207 | University Physics III | 3 | EEN 118 | Introduction to Programming | 3 |
| BIL 150 | General Biology | 4 | CAE 210 | Mechanics of Solids | 3 |
| BIL 151 | General Biology Lab | 1 | BME 310 | Mathematical Analysis in BME | 3 |
| EEN 201 | Electrical Circuit Theory | 3 | CHM 201 | Organic Chemistry I (Lecture) | 3 |
| | | | CHM 205 | Organic Chemistry Laboratory I | 1 |
| Total | | | Total | | |
| 18 | | | 18 | | |

| Junior Year: | | | | | |
|----------------------------|--|---|--------------|--|---|
| ECE2031 | Circuits and control (Equivalent of EEN 307) | 6 | BMB 258 | Introduction to Biochemistry & Molecular Biology | 3 |
| STA1010 | Statistical Methods for Science (Equivalent of IEN 311) | 6 | CHM 202 | Organic Chemistry II (Lecture) | 3 |
| MTE2548 | Biomaterials I (Equivalent of BME335) | 6 | CHM 206 | Organic Chemistry Laboratory II | 1 |
| | People and Society Elective* | 6 | BME 375 | Biomechanics | 3 |
| | Humanities and Arts Elective* | 6 | BME 401 | Senior Project I | 1 |
| | | | | Humanities and Arts Elective | 3 |
| | | | EEN 204 | Electrical Circuits Lab | 1 |
| | | | BME 311 | Matlab for Biomedical Engineers | 1 |
| UM Equivalent Total | | | Total | | |
| 15 | | | 16 | | |

| Senior Year: | | | | | |
|---------------------|--------------------------------|---|--------------|--------------------------------|---|
| BME 402 | Senior Project II | 2 | BME 403 | Senior Project III | 3 |
| BME 440 | Biomedical Measurements | 4 | BME 480 | Biomedical Instrumentation | 3 |
| BME 570 | Intro. to Biosignal Processing | 3 | BME 560 | Biomedical Transport Phenomena | 3 |
| | Technical Elective | 3 | | Technical Elective | 3 |
| | Advanced PS/HA Elective | 3 | | Technical Elective | 1 |
| BME 330 | Foundations of Medical Imaging | 3 | | Advanced PS/HA Elective | 3 |
| Total | | | Total | | |
| 18 | | | 16 | | |

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